Washington State Department of Ecology
Public Hearing for Formal Comment on Eelgrass and Burrowing Shrimp
February 1, 2014

[start of recording]

Moderator: Okay. Let the record show it is 1:08 p.m. on Saturday, February 1, 2014, and this meeting is being held at the Willapa Harbor Community Center, 916 West First Street, South Bend, Washington. The purpose of the proceedings today is to receive formal comments on two issues. The first is a proposal to control non-native eelgrass. The Shellfish Growers Association has requested a new permit for the use of the herbicide imazamox to help manage the growth of non-native eelgrass called *Zostera japonica* on commercial clam beds in Willapa Bay.

According to the growers, these beds were historically sand or mud flats, and just recently this eelgrass has been colonizing these beds, making it difficult to grow and harvest clams. The environmental impact statement, or EIS, scoping period for this proposal to control non-native eelgrass closed November 2, 2012 and Ecology has developed a draft EIS and permit. A water quality national pollutant discharge elimination system permit, referred to as a NPDES permit, is required before the herbicide can be applied under the Washington State Water Pollution Control Act. The permit would regulate the use of imazamox and marker dyes to manage *Zostera japonica* on commercial clam beds. Ecology is seeking comments through February 15, 2014, on the draft EIS and the draft permit to allow the use of this herbicide in Willapa Bay.

Just making sure this is recording. Yes, it is.

The second is a proposal to control burrowing shrimp. The Willapa Grays Harbor Oyster Growers Association submitted an application to Ecology for a water quality NPDES permit to allow the association to use the pesticide imidacloprid to control burrowing shrimp in commercial shellfish operations in Grays Harbor and Willapa Bay. Burrowing shrimp destabilize oyster beds and impact oyster production.

As part of the process to consider issuing a new permit, an EIS is being prepared. Ecology is seeking comments on the scope of the EIS for this proposal through February 15, 2014. Scoping helps the agency determine what potential impacts to analyze in the environmental review. Later this year, Ecology expects to issue the draft EIS as well as a draft permit. Ecology will hold another public comment period and public hearing before a final EIS is issued and a permit decision made.

We had outreach on this issue. Controlling the non-native eelgrass, we published a news -- or sent a news release to news media in Pacific and Grays Harbor counties on January 3, 2014. Legal notice of this hearing was published in the Washington State Register, No. 14-01-104 on December 18, 2013. Direct email notification notifying them of draft documents sent on January 2, 2014, to approximately 126 interested parties. Hard copy letters were sent on January 2, 2014, to all the appropriate tribes, EPA, and relevant agencies. And we posted the notice on our Ecology website at www.ecy.wa.gov/programs/wq/pesticides/eelgrass.html.

Regarding controlling the burrowing shrimp, a news release was sent to news media in Pacific and Grays Harbor counties on January 3rd. Focus sheet information was sent by email to approximately 80 stakeholders. And more information on this proposal was available, and still is, on the Ecology website, www.ecy.wa.gov/programs/wq/pesticides/imidacloprid/index.html.

More information is available on the following websites. We have an aquatic pesticides website. And actually that's the same one I -- almost the same one I just mentioned: www.ecy.wa.gov/programs/wq/pesticides/index.html. Website for the control of non-native eelgrass proposal is at www.ecy.wa.gov/programs/wq/pesticides/eelgrass.html. The Water Quality Program: www.ecy.wa.gov/programs/wq/wqhome.html. Bear with me, I'm almost done. Ecology's social media: www.ecy.wa.gov/about/newmedia.html. And the last one is you can join the Aquatic Pesticides listserv at http://listserv.wa.gov/cgi-bin/wa?A0=ecy-aquatic-pesticide-permits. That was a mouthful.

I've noticed that I have about 30 people that indicated that they would like to provide formal comment. Actually, that was 16. After they are done, I will give others a final opportunity. So when I call your name, please come up to this chair to the reporter, slowly and clearly state your name, address -- or your name, your address, and who you are representing, and then you can begin with your comments. And then the final thing I ask is if you are commenting on the shrimp or the eelgrass would be helpful, especially if you want to talk twice.

Okay, so the first one I have is Mark Emrich. And I will apologize in advance is I mispronounce your name. So I'm going to start this. [timer beeps] And then I'll just let you know -- then you'll know you have one minute left. That's a two-minute warning.

Mark Emrich: Just turn it so I can --

Moderator: Want me to turn it for you?

Mark Emrich: So I can just see out of the corner of my eye. Thank you.

Moderator: Okay.

Mark Emrich: My name is Mark Emrich, I'm president of the Washington State Beekeepers Association. I'm here because of the possible use of pesticide to basically knock down the numbers of ghost shrimp. In becoming the president, I've been bombarded with scientific studies on imidacloprid for three years plus. It's shown to retard growth in bee populations, memory, learning of tasks. And my concern is, since I don't believe it's ever been used in water column before, what it will do to the smallest of sea animals, starting at diatoms and working its way up.

In a lot of the studies out of Canada and Europe, it's been shown that it actually can exist in cold, wet environments such as Washington State for up to seven years on a single application. It is banned for use right now in Europe as of two weeks ago, and the ban will hold up for the next two years until scientific data that it is safe is completed. I'm worried about it getting into the food chain. And as much as I love oysters and seafood, I would love them to try to find another tool to put in their box to stop this predator from bothering the shellfish beds.

Also, the shrimp that are treated and do die [timer beeps] -- is that one minute?

Moderator: You've got one minute left.

Mark Emrich: Okay.

Moderator: It goes fast.

Mark Emrich: Oh, it does. I'm concerned about being consumed by shorebirds. A study out of Canada has shown that in areas that have been treated, swifts and starlets -- and starlings, excuse me -- that have consumed the bugs have lost body weight. In some cases, there are less numbers. And in all cases, the musculature of the birds were tested positive for neonicotinoid ingestion. So as much as I would love to say to the shellfish industry, this is a great idea or this is a good idea, in lieu of what you have been doing, I can't go along with it. And I hope that you can find another way to get rid of these shrimp. It's the end of my testimony. Thank you.

Moderator: Thank you very much. Okay, next I have Bob Merkle.

Man: He had to leave.

Moderator: Okay. Brian Sheldon? You had a question mark, so…

Brian Sheldon: I've answered my questions.

Moderator: Okay. Another question mark was Richard Wilson.

Man: He left.

Moderator: Okay. Dick Sheldon?

Dick Sheldon: That's me.

Moderator: And if you're going to talk about two different issues, make sure you talk about which one's first. I'll give you three minutes, and then you can go on the other one for another three minutes. Or if you want to talk about both of them, you get three minutes.

Dick Sheldon: You're a tough woman.

Moderator: I am. That's my job. So I need your name, your association. This is all for the record. Let me start the timer again. [timer beeps] Try and be fair.

Dick Sheldon: Let's talk about shrimp.

Moderator: Okay, your name, please.

Dick Sheldon: Pardon? Oh, name: Dick Sheldon, Ocean Park, Washington, oysterman. Shrimp populations started to increase in the Willapa in the '50s, and they've increased to the point where you can't -- can neither grow oysters nor can you grow anything else in the lands that they infect. This isn't an oyster grower problem; this is a statewide problem and whatnot. Thousands of acres of clam beds that were used for recreation all through these years and whatnot have been destroyed equally along with the shellfish beds that are commercially farmed. And where shrimp come in, it's a monoculture. Nothing else lives: eelgrass, nothing. So we have no particular way to go back to carbaryl, which was an assured cure for our problems. But this new pesticide that we're asking to be permitted for is the only thing we've got to fall back on right now. Now, it's not a matter of saving the oyster beds and the clam beds that are infected. It's a matter of setting up a process where in the future, if the agencies ever come to their senses, we'll see that the protection of our natural beds and whatnot, the state-owned beds, the public-owned beds, should be protected too. We've lost thousands of acres of these recreational lands, and we'll continue to lose more. Shrimp populations at this point in time are increasing, and to deny or to try and limit the use of this very, very, as far as I'm concerned, inferior pesticide is counter to state policy, it's counter to any common sense. We have an industry that started here [timer beeps] -- what's that thing?

Moderator: It means you've got one minute.

Dick Sheldon: We had an industry that was started here in the 1850s. It's the oldest agricultural operation in the state of Washington that goes interstate. And it's been the main and the prevalent economic driver in Pacific County ever since Pacific County was conceived. And to take this away is basically a death knell to the industry that supported everybody down in this end of the state. And to drag your feet and put a lot of extra limitations on it is counterproductive, and it shouldn't be done. Ding.

Moderator: Less than three minutes.

Dick Sheldon: Carbaryl.

Woman: He had 14 seconds left.

Dick Sheldon: Now I'll start on japonica.

Moderator: Okay, I'll reset this. So that was on shrimp.

Man: Can we turn the alarm off maybe? It interrupts the speakers.

Moderator: Well, I could, but it's difficult for me as the notetaker and timekeeper. Part of my job is to make sure that I'm fair, and so everybody is getting the beep. So I'm sorry if it's distracting, but that is our process, and I've already started that, so I'm going to continue that process today, in fairness. [timer beeps]

Dick Sheldon: Now we're talking about japonica. Japonica, I was -- I had the dubious…job for the Oyster Growers to deal with the spartina problems in Willapa Bay. The state agencies were --

During the spartina control effort, which we've completed satisfactorily -- there isn't any spartina to talk about; we went from 20,000 acres down to zero practically now, and that's the only thing that's ever been down. But the problem with this japonica thing is it's creating more of a problem for the environment and the habitat in Willapa Bay than the spartina ever did. Unfortunately, the spartina, the spartina control thing basically set the precedent for how this is being controlled. We waited 10 years before we -- well, we hadn't had the information to kill spartina before we got through the agencies and got a chemical that we could actually do it with and a process to do it with. And this is a replay of this whole damn thing.

Now, I spent, since I was 5 years old wandering around the oyster beds and the sand flats of Willapa, I have never seen anything like this japonica that's caused so much damage. It's totally wiped out habitat for crabs, for fish, for anything that this thing covers, because it changes the structure of the intertidal to the point that you change from basically a habitat that supports shellfish, not only crabs -- or not only oysters and clams, but [timer beeps] crabs and all other kinds of shellfish, along with flatfish and all the other things that use the intertidal. And it changes to the point that they don't use it anymore. It turns it into a mucky bog. It's going to -- it's going to -- if we -- the limitations that are being put on the use of this new pesticide I feel are way above what should be done. And that we should open this thing up, because there again, all the public lands in Willapa are also being invaded by this stuff, and it's going to carry on to every other estuary along the state of Washington if we don't try to control it in Willapa. I might also add that the growers are the ones that are finding the solution with their dollars, and this is going to be used by the state. And whatever in the future, when they finally come to their senses and find out that this stuff is destroying not only this estuary, but it'll probably go right on into Puget Sound eventually. Ding.

Moderator: Thank you. Okay, make sure we're good. Yep. Okay, let's see. Rebecca Shafe? Shaff?

Rebecca Shafe: I don't have any comment.

Moderator: No? Okay. Let's see, let me make sure I didn't have any more question marks on that page. Nope. Okay, Don -- I'm sorry, I have no clue what your last name is. U-I-L-I-E-S? But Don I think is the name.

Don Gillies: Gillies.

Moderator: Gillies. Gillies. Oh, kind of like Mickey Gilley?

Don Gillies: Yes, spelled differently, though.

Moderator: Okay. So name and association and which subject matter.

Don Gillies: Don Gillies with Stony Point Oyster Company. And I'm going to talk about the burrowing shrimp. First, I just want to say that as an oyster grower, we have a problem. The shellfish industry is in jeopardy of collapse. The growers have a vested interest in the property. They own the property. And it's been shown over and over again that they are very concerned

about the health of the estuary. A considerable amount of money and resources have been dedicated to finding a suitable solution. A list was generated -- I don't know, I think Derek said the list was 250, and I probably lost count at 150 -- of different possible scenarios that we could employ to use the tool to control this problem. And we've narrowed it down to, unfortunately, one suitable solution, imidacloprid, and that's where we've spent our resources and time to try to get this thing permitted over the last eight years.

What my questions are is, I want to know what's going to happen to the Pacific County economy if burrowing shrimp cannot be controlled. I also want to know what is going to happen to the estuary of Willapa Bay if shellfish populations disappear. I'm also very concerned about what is going to happen to my business if it fails, and my family, [timer beeps] and I'm hoping that Ecology can answer that question for me.

Moderator: You've still got 55 seconds.

Don Gillies: I'm done.

Moderator: Okay.

Don Gillies: So now I want to talk -- I just have one statement about --

Moderator: Okay, hold on. Let me finish that last one, and then…. I'm just trying to take brief notes that will complement the notes when this gets transcribed. So my notes are by no ways and means the full record of that. So the second one is eelgrass. Okay. [timer beeps]

Don Gillies: You don't need that. I'm not going to be very long.

Moderator: Okay. Well, I'm going to have to reset it anyway.

Don Gillies: Okay, so my one comment about the control of japonica eelgrass is I want to know, if the buffer size validation study shows that it is not necessary to be at 10 meters in size to protect native eelgrass, after the study, if it determines, will the size be reduced or eliminated if it shows that there is no need for it? That's it.

Moderator: Okay. Just a second. [timer beeps] Okay, Christine Barkhurst? No? Okay.

[indistinct comment]

Moderator: Pardon me?

[indistinct comment]

Moderator: Okay, I'll come back after everyone's had their chance.

Christine Barkhurst: Thank you.

Moderator: You'll get another chance. I see a question mark for Blaine Reeves. No? Okay. Maybe from Warren Cowell?

Warren Cowell: I'll defer my comments to written form.

Moderator: Okay. Did you send a -- Don Gillies I have down twice. So you've already commented, so I'm assuming that you're done. Kim, and I really hesitate to say your last name. Fatton? Patten?

Kim Patten: Patten.

Moderator: Patten?

Kim Patten: Do you mind if I turn the chair this way? Because I --

Moderator: Yes, I do, actually.

Kim Patten: You do! I have to look at you?

Moderator: Yes.

Kim Patten: Okay, that's fine.

Moderator: I'm sorry. I'm sorry, I --

Kim Patten: There's a rule that says I have to look at you when I give a testimony. Fine.

Moderator: Well, I'll tell you what, I'll do this, if that'll help. I'm sorry. [timer beeps]

Kim Patten: Okay, my name is Kim Patten, and I represent WSU Extension. I'm also a small clam farmer. I want to testify on behalf of imidacl-- on the imidacloprid.

Man: We can't hear!

Kim Patten: Okay, I'll talk louder. I'm testifying on behalf of imidacloprid. First, I'd like to thank our two young gentlemen there, did an outstanding job, and for Sally for this whole process. It's been very good. So I would like to address the pollinator issue, which is a very valid point that was brought up earlier. I have worked on pollinators, native pollinators, and actually to use imidacloprid for the last 20 years, and as it relates to this, and it is a real concern. But I think the scoping of this process needs to address actual the use patterns as it affects pollinators. This is not a terrestrial crop, it's an aquatic crop, and we have no pollinators out there. So the scoping needs to address potential impact that this would go off-target and affect pollinators. And be limited in that scope, not to take on the whole breadth of pollinators and imidacloprid, because that would be a major issue and major undertaking.

The second thing I would like to see addressed in the scoping is in terms of the alternative analysis, and that is of the no treatment in the internal analysis. And what will be the social and the community impact of no treatment, of not using imidacloprid and the 80-90% decline in the shellfish industry over the long term of a 20-30 year period? And that has to include, in addition to other stressors that are involved, like ocean acidification and higher recruitment. And so it has to, I think, pool those combined in there.

In addition to that, I think the scoping analysis for the alternative component [timer beeps] should address the baywide ecosystem effects and the long-term effects. So if your shellfish industry has been significantly impacted and reduced, what does the system, what does the bay look like? What are those ecosystem impacts? That's all I have.

Moderator: Okay.

Kim Patten: Thank you.

Moderator: Thank you very much. I might mess up this name, too. Gustave Wiegardt?

Gustave Wiegardt: Yes.

Moderator: I apologize if I didn't pronounce it correctly. [timer beeps] And then if you'll again give your name and association.

Gustave Wiegardt: Ready? My name is Gustave Wiegardt. I retired from the shellfish processing business, and now a mini-clam grower in retirement. For about the last 15 years, I've been trying to enhance my clam ground with shell and rock. And we've been harvesting on an increasing basis about every two years. And the last time we harvested was from October 2010 until May of 2011. And we expected to harvest the crop again within the last few months. Upon further examination, we find that the clams are still small, and it could be up to another year before we can harvest them. So I've been trying to figure out why this has happened. And the only variable that I can see is the proliferation of japonica, which has really taken over the bed. So I'm in support of using the chemical to control this.

I'm also a duck hunter. I know there's concern that spray might kill all the feed for ducks if that's what they're eating. But the amount of acreage that would be sprayed would be very small. There would be vast areas of the bay that would not be treated. So I don't think there's going to be an impact on the food for the duck population. My comment and concern would be about [timer beeps] the overuse of the buffer zone. I'm hoping that that can be reduced.

Moderator: Done?

Gustave Wiegardt: Okay.

Moderator: All right, thank you. Okay, I know this name. I can see this one right. Bill Taylor. Again, if you could name, affiliation, and which one you're talking about.

Bill Taylor: Okay. Bill Taylor, Taylor Shellfish. Address is 130 Southeast Lynch Road, Shelton, Washington. And I'll address first the imazamox, application for imazamox. My family purchased East Point Seafood in the late '90s. And at that time, we -- a lot of the upper flats, particularly in the Oysterville area, were bare sand flats. There was good clam populations on those sand flats. And over that past 15 years or so, the productivity has diminished dramatically as the japonica has grown. It was almost nonexistent when we first started farming there and has gone to where we basically are farming a very small amount of clams in that area. So having some control on that japonica would help bring jobs and take the flats back to what they were originally.

I'll move on to the imidacloprid.

Moderator: Do you want me to start over?

Bill Taylor: I think I can probably get it done. We hire -- or we have about probably 50 employees that depend upon Willapa Bay for employment. About half of them work in Willapa Bay area, and the other half work in our processing plant in Shelton. The burrowing shrimp populations, when they're high enough, literally destruct the oyster beds. The crops sink. And we've worked on this problem with a number of alternative solutions that we hoped would work. We've used water jets, we've used crushing, we've done shell paving, we've tried alternate methods of culture types. And when the shrimp density is too high, even alternative culture methods don't work. We're currently seeing an explosion of -- or a great increase in the shrimp density. And I don't think any of the [timer beeps] -- any of those will be successful without some control. That's it.

Moderator: Thank you. Okay, Eric Hall? Name and address and what subject you're talking about.

Eric Hall: My name is Eric Hall, and I'm with Taylor Shellfish Company, and I live in Montesano, Washington. I'm here to give comment on both imidacloprid and imazamox. And I'll begin with imidacloprid. I've farmed shellfish in Washington State for Taylor Shellfish Company for the last 25 years. Our shellfish industry plays a critical role in our local and state economies. Without a viable tool to control shrimp in Willapa Bay and Grays Harbor, the health of our industry and livelihood is in jeopardy. Currently we have an emergency situation in Willapa Bay. We currently have no tool to control shrimp. And in the last few years, we have seen a significant increase in shrimp recruits into the bay. With no tool to control these recruits that come into the bay and that have been coming into the bay, it's a matter of time before our industry is done. And I would urge the Department of Ecology to move forward with this permit to save our industry.

And I'd like to add comment on imazamox.

Moderator: Okay. Hold on one second. Okay, go ahead.

Eric Hall: Our company owns, and I manage, over 1,000 acres of clam ground in Willapa Bay. And the 1990s and 2000s, our company invested well over a million dollars in capital [timer

beeps] -- we invested well over a million dollars in labor and capital to develop portions of our clam ground in the Oysterville area. Our development increased our clam productivity, and in turn it created jobs. These are jobs that provide a livable wage. These are jobs that have many health benefits for our employees and retirement benefits, and a wage that can raise a family. And it also provides income for our local economy. One of the -- I think one of the viable parts of the shellfish industry is one of our highest costs, is our labor costs. And that labor cost that we pay those employees, those are dollars that are pumped right back into our local economy. So the shellfish industry, we play an important role in our local economy and we play an important role in monitoring the health of our estuary.

Moderator: Done?

Eric Hall: And the last comment I was going to make was japonica has taken over at such an alarming rate on our clam ground in the Oysterville area that our company had to walk away from 1,000 acres of ground that is currently unfarmable. And I would urge the Department of Ecology to give the farmers a tool so that we can continue farming. That's all I have.

Moderator: Okay. Next yes I had on this page was Paul Philpot. I know I talked to him earlier. Is he still here? There you are. I have your business card right there.

Paul Philpot: I hope the recorder can take care of the Southern accent.

Moderator: Hey, I grew up in Texas, so I can do it. Your name, association.

Paul Philpot: I'll probably give you more than you want. Paul Philpot, executive director, Pacific County Economic Development Council. The Pacific County Economic Development Council exists to attract, create, retain, and expand jobs for residents of Pacific County and to promote and protect the county's economic health. If one looks around our county, it's obvious that our business owners and industrial concerns have a vested interest in maintaining the area's environmental health too. Since our natural resources provide the base for the economy, we see that there's a significant impact for marine industries in Pacific County in terms of both employment and their annual sales. That's over 1,000 jobs and over $150 million in sales that are generated by the marine industries. The Pacific County EDC supports program studies and the use of products that provide our marine industries with the opportunity to continue to operate in a manner that generates a reasonable profit, generating revenue that turns over within the local economy, and maintains these jobs for our residents and our county, and some in the surrounding area. Thank you.

Moderator: Did you want to read that too?

Paul Philpot: Oh, I thought they were going in the basket.

Moderator: Okay. Either way. Okay, those were all the ones that I had that definitely wanted to speak. So are there any others who -- yes, sir.

Ross Barkhurst: I signed up to speak and said yes, so.

Moderator: Oh, I'm sorry. Maybe there was more on the -- the ones I pulled up at the time. The others were empty, so my apologies. We will go look at the other pages and continue on with those. So if you could just hold off, please.

Ross Barkhurst: These are just handouts.

Moderator: Okay, let's see. What is your name, sir?

Ross Barkhurst: Ross Barkhurst. I filled out a card and put "yes" on it.

Moderator: Oh, you know what, you are right. You are the only one that actually filled out a card.

Ross Barkhurst: Hey.

Moderator: That is my oversight.

Ross Barkhurst: I get an extra minute for that. [laughter]

Moderator: I haven't started the clock yet. So this is you.

Ross Barkhurst: That's me. Yes, ma'am.

Moderator: Okay, so let me…Ross Bark… so your name, your affiliation, and then which subject you will be speaking on.

Ross Barkhurst: Ross Barkhurst, South Bend, Washington. I'm a member of Washington Waterfowl Association. I want to talk about both subjects. I want to point out that if I'm talking about things that don't have feathers on them, like fish, I'm not talking about for Washington Waterfowl in that case. They want to stick to waterfowl. They've got their hands full. So are you going to start the clock?

Moderator: I've already started.

Ross Barkhurst: Oh, you're already on. Waterfowl and salmon are going to bear the brunt of this. The Shoreline Management Act is a shoreline -- says we're a shoreline of statewide significance. We have a flawed process here which looks like it's going to apply to both. And it's produced a flawed result. When you look at it, folks have been doing their job, but it's all ag, all the time. You go to the Washington Noxious Weed Board, and they told us that you're in the wrong place. We don't care if you wipe out marina, you need to go to Ecology. The Department of Ecology authors of this both were transferred from the ag department. And when you have a technical question about something that we have to say, you check with the ag extension agent or the applicant. So inputs from WDFW, DNR, citizens, and Washington Waterfowl have been ignored.

Impacts on salmon have been essentially admitted. Small habitat is a key. This team is set up where it can't produce any satisfactory result, and it can't fix this. It needs a redo. I'll quote Albert Einstein: "A problem can't be solved through the conscience that created it." So there isn't a balance here. We need a balance. I'm not arguing that aquaculture needs some relief, and I am a commercial shellfish grower. Wildlife conservation, cumulative effects, and public interest are missing so far from this process.

And I'll read you the fatal flaws. Pacific brant wintering grounds could be sprayed under this, because they're mixed beds, a lot of it. Pacific brant spring staging grounds and mating grounds can be sprayed while the birds are present, the last two weeks in April. Preferred chum salmon habitat can be sprayed while the smolts are present. None of this is addressed or mentioned in here. [timer beeps] No critical locations are protected. No collateral damage prevention exists for native eelgrass, which is supposed to be protected. It can be ratcheted back and is encouraged to do so. There's no connectivity from smolts from spawning streams out into the channels. Duck grass is repeatedly denied as a major waterfowl forage when it is.

Misleading statements are used in here throughout. It says that we didn't find any mallards on the refuge that had duck grass in them. The only opening hunting areas in the refuge have no duck grass in them. That could really lead you astray. A loss of caring capacity for many species, including the list of green sturgeon, is unestimated, unmeasured before spraying, unlimited by precautions by checks, and totally deniable afterwards. The definition of controllable areas seems to have morphed to clam beds. It used to say clam beds except for geoducks. When you say clam beds, it's not hardshell clam beds; you include eastern softshell clams. So this isn't Billy Ed saying, "Can I fix my hardshell clam bed?" This is somebody else saying, "Let me go anywhere in the bay and go after all of it."

Moderator: I have to cut you off.

Ross Barkhurst: No precautions and limitations. Thank you.

Moderator: Okay, I did receive, Rick brought up one more page, and it did have a couple names, but neither one said yes. So, and I did have only the one card. So again, my apologies, because he's the only one that filled out one of these. So is there any --

[indistinct comment]

Moderator: Pardon me?

Gary Johnson: I was on the list. Gary Johnson.

Moderator: Gary Johnson? I do have you on here. You're after Gustave. So you will be number 10. So Gary Johnson. And my apologies for missing you the first time around.

Gary Johnson: No problem.

Moderator: So just hold on a sec. Again, name, address, affiliation, and what subject you're talking about, please.

Gary Johnson: Gary Johnson, Raymond, Washington. I'm here to talk on the amoxi-- amoxiprid (sp?) application. As a former orchard manager and a licensed pesticide applicator, I am opposed to any pesticide or herbicide spraying in the Willapa Bay that could affect seafood, wildlife, and humans. These proposed chemical applications are never a permanent fix to the problem. What's the answer? More chemicals. I also worked for Fred Hutchinson Cancer Research Center for 10 years and saw the impacts of cancer. Families were completely devastated and fighting for their lives, hoping to be cured.

I was deer hunting this year in the Willapa Hills and I found this sign: "Notice: This road system is scheduled to be treated with LV6 and/or Accord XRT and/or Guardian XRT within 25 feet of the road on or after July 12th. Remember, berry picking not -- not be done directly along the roadside." They also spray the hillsides with defoliants that turn the entire hillside brown. All these chemicals end up in our food and in our water. And we wonder why the United States has some of the highest cancer rates in the world. Remember, we once thought DDT was safe until years later when we found out it caused liver, pancreas, breast cancers, premature births, low birth rates, and many other adverse effects to human health. Can anybody in this room trust the EPA, the Department of Ecology? We now have Round-Up in our food, thanks to Monsanto, EPA, and the Department of Ecology.

We already talked about the bees, the issues there. Exposed birds and ex-- they experienced -- exhibited wing drop, osteoporosis, immobility, hyperactivity [timer beeps], fluid-filled crops and intestines, and discolored livers. Reproductive studies with the mallard ducks showed eggshell thinning. According to the European Food and Safety Authority, amoxiprid (sp?) poses a potential high acute risk. A study conducted in rats suggests that neoplates (sp?) may adversely affect human health, especially the developing brain. I understand that we need seafood, jobs, et cetera, but at what cost? Is our health more important than some eelgrass or sand shrimp? Some inconvenience is a fair trade for less cancer in our families. Thank you for your time and consideration.

Moderator: Thank you. I want to carefully look through this list one more time to see if I have to eat any more crow today. Let's see, got him. All those were no's. No. Asked that one. Got that one. Got that one. Got that one. That one. Got that one. Okay, nope. I checked my list, and I have no other -- let's see, one more page. Got him. Okay, so nope, I've double checked my list, and I've got everybody, including Mr. Barkhurst. So is there anyone else at this time who would like to come up and formally comment? Come on up. And just give me your name, affiliation, address, and which issue you're talking about. You can just give me your name if you've signed in. Have you signed in?

Marilyn Sheldon: Yeah.

Moderator: Yeah, just as long as you give me your name.

Marilyn Sheldon: Okay. Marilyn Sheldon, and my husband has Northern Oyster Company in Nahcotta, Washington. Our family relies 100 percent on the shellfish industry for our income, as do many families. I appreciate DOE going through this public process, and I would just urge them to continue in an expeditious manner these permitting processes, because the Growers Association, which is made up of, you know, individual growers, have invested an incredible amount of time, money, energy, volunteer time into these processes. And when it comes to public comment and a lot of other things, a lot of people are able to come and give input even though they haven't been involved all the way through the process. Or some of them have been involved through the process but not involved in trying to find alternatives or trying to contribute to the studies that are done. And so I would -- I think it needs to be taken into consideration all the work, time, and energy that the growers have put in to try to find alternatives and to try to address issues or problems that have been raised. And would encourage anybody who has some of these problems and issues to -- to, you know, donate some of their time, energy, and money to find these alternatives and to try to work through some of these studies if they believe they aren't, you know, aren't being done correctly or done extensively enough, because I believe they're being done more -- too extensive. I believe we're, you know, studying things way past what they -- what they need to be done. And once they get a result and it shows that the issues have been addressed, I hope DOE can take those results and come up with a permanent and in expeditious manner that's fair to everyone. Thank you very much.

Moderator: Thank you. Anyone else?

Man: Another comment?

Moderator: You had your bite at the apple, your two bites at the apple. If you have additional comments, you can provide them in writing. Any other -- is there anybody else who would like to provide verbal comments today that hasn't already -- did you provide comments earlier?

Brian Sheldon: No.

Moderator: Okay, you opted out the first time around. No, weren't you up here the first time?

Woman: No.

Moderator: Okay. What was your name?

[indistinct response]

Moderator: Okay, because I remember asking.

Brian Sheldon: Should I come up now?

Moderator: Yeah, you can come up now. I just want to make sure. I'm recording all of the names and numbers. Okay, so Brian Sheldon. I had you right here. So you'll be number 12.

Brian Sheldon: I'll be quick.

Moderator: Okay. Name, affiliation.

Brian Sheldon: Brian Sheldon. I'm with Northern Oyster Company. I'm a third-generation shellfish grower in Willapa Bay. And we care deeply about Willapa Bay and everything that grows in and around it. Shellfish growers participate in every aspect of our community, from not only shellfish farming but working on growth management policy and working on assuring that improper developments don't occur to keep water quality premium. That's one of the reasons that after over 50 years of controlling shrimp in Willapa Bay using carbaryl that Willapa Bay is still one of the healthiest ecosystems in the United States. We set a high bar when we pursue any kind of these kind of processes for pest management, because we expect everybody to have that bar set. As our farm has gone, I've watched our farm go from an extremely productive farm on clam farming to being overrun with japonica. I've watched the sediments completely transform. I've watched the shorebirds disappear from feeding on the flats. And it's been -- I can't tell you how much damage we've seen on our farm. But it goes beyond our borders. Japonica doesn't stop at our borders. And I really hope that the folks that are managing public lands move ahead with control programs, because you can't have an invasive species completely altering and estuary without having long-term problematic impacts along the coast.

The shrimp populations -- switching to the imidacloprid discussion. The shrimp populations are exploding in Willapa Bay, and at the same time, we've had failures of natural sets in our bay. That has caused a lot of us who [timer beeps] relied partially on hatchery set oyster seed to rely 100 percent on that seed. And that means that the costs of production go way up. And so we can't put this kind of seed on ground that's infested with shrimp or we'll lose entire crops. And so on the one hand, we don't have the wild set seed that we used to rely on more, and now we're relying on hatchery set seed, and we need the ground to be able to grow these oysters. And it's ground that isn't the same as wild set ground. So what it means is we've got ground that is being infested that shrimp that we rely on for this sort of growth cycle, part of the growth cycle of the oyster, that we are going to lose if we don't get some control. And then our harvest ground, we'll start to lose that too.

So in general, I just hope everybody understands that, for instance, the imidacloprid, we've been working on this tool since 1996. It's not an overnight thing. We didn't just start last week. I also want to say that I've spent a lot of time out on the shellfish beds. I have never ever seen any kind of spawning or anything taking place around japonica. This time of year, japonica is extremely thin; it probably reduces by about 95 percent. So there's just nothing there for any kind of spawning to occur on. Other than that, please support your local shellfish grower.

Moderator: Thank you. Okay, anyone else? Going once. Come on up.

[indistinct comment]

Michael Lambert: My name is Michael Lambert. I'm a --

Moderator: One second. [timer beeps] Michael Lambert?

Michael Lambert: Yeah, L-A-M-B-E-R-T. I'm an oyster and clam laborer on the Willapa Bay. I have done so for different companies since I was a child. It seems disheartening that something -- an industry so old and so productive for so long would be just let go and not taken care of and there's so much opposition to without real input to not control things to create -- or increase the longevity of this industry. As someone searching for a career growing up and knowing people that are younger who are coming up in the industry, how do we expect to keep young people in the industry and create -- or bring in more people who could be of influence and a productive influence in this industry, how does that expect to happen when they're just going to let -- there's a possibility of letting this industry die? As someone who plans to work in the industry for a long time, I would really just hope that this is taken care of, that we can solve this issue and future issues in a timely manner. And that's all.

Moderator: Thank you. Okay, next? Going once. I'm about to start into my closure spiel. Okay. Let me find my notes, go back into my closure spiel.

Okay. I'll go ahead and stand up for this part of it. Plus, my legs are stiff from sitting for so long. As a final reminder, I'd like to say that all comments that are received today verbally or in written format are part of the official record for these two proposals. You can provide written comments on the Draft Permit for *Zostera japonica* Management on Commercial Clam Beds in Willapa Bay by email or by regular mail through February 15, 2014. You can email the comments to Nathan.Lubliner@ecy.wa.gov. You can send him written comments to Attn: Nathan Lubliner, Department of Ecology, Water Quality Program, P.O. Box 47600, Olympia, Washington 98504-7600. For the draft permit, Ecology will post the comments and informal response to comments document on the *Zostera japonica* Management on Commercial Clam Beds in Willapa Bay General Permit website. And that website is located at http://www.ecy.wa.gov/programs/wq/pesticides/eelgrass.html.

The final EIS will include a responsiveness summary addressing all comments received on the draft EIS. You can provide written comments on the Proposed Individual Permit for the Control of Burrowing Shrimp Using Imidacloprid on Commercial Shellfish Beds in Willapa Bay and Grays Harbor by email or by regular mail. Email would go to shrimpcontrolpermit@ecy.wa.gov or you can send written comments to Attn: Derek Rockett, Department of Ecology, Water Quality Program, Southwest Regional Office, P.O. Box 47775, Olympia, Washington 98504-7775. The addresses for submitting comments are all available on the handouts available at the tables that we have for the open house. We encourage you to take any hard copies provided by Nathan and Derek today.

Again, Ecology must receive all comments for either proposal by February 15, 2014. And on one of their handouts they have a listserv, and I mentioned that earlier. And if you sign up for that listserv, you will receive email updates on the process.

If you did not sign in, please do so before leaving. If you have other questions about the presentations that you've heard today, Ecology staff is available after the conclusion of this meeting to speak with you. On behalf of the Department of Ecology staff, we thank you for coming today. We appreciate your time and comments. I will hand it back over to Sally, but for the record, we will show that this meeting is adjourned at 2:12 p.m.

Sally: Thank you.

[end of recording]